

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
09/756,556	01/08/2001	Wolfgang Bachmann	HAS-011.01	5700		
25181	7590 07/16/2004		EXAM	EXAMINER		
FOLEY HO	•	LE, HUYEN D				
PATENT GR 155 SEAPOI	ROUP, WORLD TRADE ( RT BLVD	ART UNIT	PAPER NUMBER			
BOSTON, MA 02110			2643	/,0		
			DATE MAILED: 07/16/2004	v		

Please find below and/or attached an Office communication concerning this application or proceeding.

		Ap	plication No.	Apr	olicant(s)				
			/756,556	BAC	BACHMANN ET AL.				
Office Action Summary		Exa	aminer	Art	Art Unit				
		ни	YEN D. LE	264	3				
	The MAILING DATE of this commun	ication appears	on the cover shee	t with the corres	pondence ad	Idress			
Period fo									
THE N - Exten after: - If the - If NO - Failur Any r	DRTENED STATUTORY PERIOD F MAILING DATE OF THIS COMMUN sions of time may be available under the provisions SIX (6) MONTHS from the mailing date of this comperiod for reply specified above is less than thirty (3 period for reply is specified above, the maximum st e to reply within the set or extended period for reply sply received by the Office later than three months d patent term adjustment. See 37 CFR 1.704(b).	ICATION. of 37 CFR 1.136(a). nunication. 0) days, a reply within atutory period will app will, by statute, cause	In no event, however, ma the statutory minimum o ly and will expire SIX (6) l the application to becom	y a reply be timely file f thirty (30) days will b MONTHS from the ma le ABANDONED (35)	d e considered timel illing date of this c U.S.C. § 133).				
Status									
1) 🛛	Responsive to communication(s) file	ed on .							
· ·									
	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.								
Disposition of Claims									
5)□ 6)⊠ 7)⊠	4)⊠ Claim(s) <u>1-16</u> is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration.  5)□ Claim(s) is/are allowed.								
Application	on Papers								
9)[	The specification is objected to by th	e Examiner.							
10) 🔲 -	10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.								
	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).								
	Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.								
Priority u	nder 35 U.S.C. § 119								
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>									
Attachment	(s)								
1) Notice 2) Notice 3) Inform	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (Pation Disclosure Statement(s) (PTO-1449 or No(s)/Mail Date <u>9</u> .		Paper I	ew Summary (PTO- No(s)/Mail Date. of Informal Patent /	<u> </u>	O-152)			

U.S. Patent and Trademark Office PTOL-326 (Rev. 1-04) · Application/Control Number: 09/756,556

Art Unit: 2643

## Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 1-2, 4-7 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Yanagishima et al. (U.S. patent 4,514,599).

Regarding claims 1, 4, Yanagishima teaches flat panel loudspeaker arrangement which comprises a plurality of panel loudspeakers (5001, 5002, 5013, 5018, 5019, figures 3, 15, 16, 29, 30) of similar construction. As shown in the drawings, the panel loudspeakers of similar construction are positioned side-by-side and abutting seamlessly as claimed.

Regarding claim 2, Yangishima teaches the individual panel speakers include at least one driver, a sound panel and a support as claimed (figures 1, 5, 6, 7, 8).

Regarding claims 5-7 and 10, Yangishima shows a spacer profile (528, 529, 544, 545, 547, 550) in the backside of the sound panel (figures 7-10).

3. Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Watters et al. (U.S. patent 3,347,335).

Regarding claims 1-3, Watters teaches flat panel loudspeaker arrangement which comprises a plurality of panel loudspeakers (figure 6) of similar construction. As shown in the

Application/Control Number: 09/756,556 Page 3

Art Unit: 2643

drawings, the panel loudspeakers of similar construction are positioned side-by-side and abutting seamlessly as claimed (also see figure 2).

4. Claims 1-2, 4-8 and 10-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Tanaka (U.S. patent 5,025,474).

Regarding claims 1 and 4, Tanaka teaches flat panel loudspeaker arrangement which comprises a plurality of panel loudspeakers (figures 7, 12a, 12b, 16a, 16b) of similar construction. As shown in the drawings, the panel loudspeakers of similar construction are positioned side-by-side and abutting seamlessly as claimed.

Regarding claim 2, Tanaka teaches the individual panel speakers include at least one driver, a sound panel and a support as claimed (see the drawings).

Regarding claims 5-8 and 10, Tanaka teaches shows a spacer profile as claimed (23, 24, 26) in the backside of the sound panel.

Regarding claims 11-15, Tanaka shows a vent opening that includes a bass reflex tube or floating tube as claimed (15, 15a, 15b, 25, figures 3, 7, 12b, 14).

### Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

<sup>(</sup>a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

- Application/Control Number: 09/756,556

Art Unit: 2643

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tanaka et al. (U.S. patent 5,025,474).

Takewa does not specifically teach the type of the diaphragm (1a, 1b, 1c) as claimed. However, the examiner takes the Office Notice that providing a light, shear-resistant core sandwiched between the cover layers for the diaphragm in a speaker is very well known in the art.

Since Takewa does not restrict to any specific type of the diaphragm; it therefore would have been obvious to one skilled in the art to provide any type of the diaphragm (1, 1a, 1b, 1c) of the Takewa speaker for an alternate choice and depending on the desired frequency characteristics.

7. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yanagishima et al. (U.S. patent 4,514,599) or Watters et al. (U.S. patent 3,347,335) or Tanaka et al. (U.S. patent 5,025,474).

Art Unit: 2643

Yanagishima, Watters or Tanaka does not specifically teach a bridge network as claimed.

However, it is very well known in the art to electrically connect the speakers in the form of a bridge network.

Since Yanagishima, Watters or Tanaka does not restrict to any specific electrical connections for the panel loudspeakers; it therefore would have been obvious to one skilled in the art to provide any form of electrical connections for the speakers of Yanagishima, Watters or Tanaka such as the form of bridge network for an alternate choice.

### Allowable Subject Matter

8. Claim 9 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Mochida (U.S. 3,509,290) teaches a flat plate type loudspeaker with a plurality of drivers.

Takewa (U.S. 4,899,390) teaches a loudspeaker diaphragm having a core structure that is sandwiched between the layers.

\* Application/Control Number: 09/756,556

Art Unit: 2643

Any inquiry concerning this communication or earlier communications from the 10.

examiner should be directed to HUYEN D. LE whose telephone number is (703) 305-4844. The

examiner can normally be reached on 9:30AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, CURTIS KUNTZ can be reached on (703) 305-4708. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

HL

June 11, 2004

PRIMARY EXAMINER

Page 6